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10/564,733	01/17/2006	Yuichiro Ogawa	Q92702	9813

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EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1791	

NOTIFICATION DATE	DELIVERY MODE
11/27/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/564,733	OGAWA, YUICHIRO	
	Examiner	Art Unit	
	Steven D. Maki	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,4-6,10,11,13 and 14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,4,5,10,11,13 and 14* is/are rejected.

7)☒ Claim(s) *6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1) Claims 13 and 14 are objected to because of the following informalities: In claim 13 (line 12 and line 34) and claim 14 (line 12 and line 34), "wherein ... comprising" should be --wherein ... comprises-- to correct the grammar. Appropriate correction is required.

2) The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3) Claims 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 13, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the omission of the subject matter of the tread rubber being made of low conductive rubber. The original disclosure describes using the electrically conductive band for low conductive rubber to sufficiently discharge static electricity while reducing rolling resistance and, consequently, teaches away from omitting low conductive rubber. It is noted that (1) claim 13 fails to describe the base tread rubber being made of low conductive rubber and (2) claim 13 fails to describe the cap tread rubber being made of low conductive rubber. It is emphasized that the

original abstract, original summary of the invention and original claims describe low conductive rubber.

In claims 13 and 14, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is "the middle part being inclined with respect to at least one of the top face of the first base tread rubber portion and the bottom face of the second base tread rubber portion" (emphasis added). This language redefines the invention in a manner not contemplated by the inventor at the time the original disclosure was filed because in all embodiments of the original disclosure, the middle part is inclined with respect to both the top face and bottom face.

4) The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5) Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14 lines 35-36, there is no antecedent basis for "the first base cap rubber portion" (emphasis addded) and, as such, the scope of claim 14 is unclear.

Claim 14 lines 23-44 describes the cap tread layer, but it is unclear why lines 42-44 describe the first and second base tread rubber portions instead of the first and second cap tread rubber portions.

Claim 14 is directed to a "method of producing a tire". Claim 14 lines 2-49 describe the structure of the tire and claim 14 lines 51-55 describe steps. However, the description of the method of producing the tire is incomplete and ambiguous since the description of the tire includes structure not mentioned in the steps at lines 50-55. For example, it is unclear if the steps at lines 51-55 form the base tread layer and/or cap tread layer.

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7) **Claims 2, 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (US 2002/0007893) in view of Verbrugghe (WO 98/38050) and Japan 426 (JP 11-020426).**

Koyama et al discloses a method for producing a tire having a tread comprising providing tire material 4 on a rotating support 3; winding an **uncured first portion 8a of low electrically conductive rubber** on the tire material 4; winding **uncured high electrically conductive rubber ribbon 10** to form an electrically conductive layer 9; and winding an **uncured second portion 8b of low electrically conductive rubber**. The ribbon may have a thickness of 0.2-0.7 mm and a width of 1-80 mm (0.1 cm to 8.0 cm). The ribbon 10 may be wound only once such that it is inclined (figure 3b, paragraph 46). The ribbon 10 may be wound plural times (Figure 2, 3c, 3d, 4, 5). The low electrically conductive rubber may be formed by winding a ribbon as an alternative

to winding an integral shaped body (paragraph 53). The outer surface of the tire material 4 may be defined by a belt cord coating layer 6. The tread may have a cap base structure (figure 4). Koyama et al does not recite the ribbon 10 as having a top part and bottom part as set forth in claims 2 and 11.

As to claims 2 and 11, it would have been obvious to one of ordinary skill in the art to wind an uncured thin high conductive rubber sheet in Koyama et al's method of making a tire having a tread such that a "top part" of the conductive sheet extends on a "top face" of the low conductive first portion, a "'middle part" of the conductive sheet is inclined and extends between the low conductive first portion and the low conductive second portion, and a "bottom part" of the conductive sheet extends under a bottom face of the low conductive second portion since (1) Koyama teaches forming a conductive path through a tread by winding the low conductive first portion, high conductive rubber ribbon 10 and low conductive second portion such that **the high conductive rubber ribbon 10** is wound only one turn, inclined with respect to the radial direction and disposed between the low conductive first portion and low conductive second portion, (2) Verbrugghe suggests forming a conductive path through an individual low conductive layer 7 of the tread by extending a **conductive rubber strip 12** such that, in addition to having an inclined middle part, the conductive strip 12 has a top part 120 extending on a top face of end portion of the low conductive layer 7 and a bottom part 122 extending under a bottom face of a bottom end portion of the low conductive layer 7 to *ensure electrical connection of the two faces* (Figure 2, abstract, machine translation), and (3) Japan 426 suggests forming a **conductive rubber layer 2**

extending through a tread such that the conductive layer has a wide top part, a middle part and a wide bottom part (Figure 1 or Figure 3) to *obtain full antistatic effect*. With respect to the belt, Koyama et al teaches that 6 may be a belt cord coating layer made of high electrically conductive rubber. With respect to "displacing" (claim 12), note Koyama et al's teaching to wind ribbon onto a rotating tire material 4. In any event: It would have been obvious to one of ordinary skill in the art to "displace" the rotating tire material 4 while winding the ribbon since official notice is taken that it is well known / conventional per se in the tire art to wind an uncured rubber ribbon on a "rotating, displacing tire raw member". With respect to "thin". Koyama teaches that the ribbon may have a thickness of 0.2 mm to 0.7 mm. With respect to winding plural times, Koyama et al teaches forming the uncured tread rubber by winding low electrically conductive ribbon. The claimed invention has not been compared with Koyama et al. No unexpected results over Koyama et al have been shown.

As to claim 5, see Figure 3b. Claim 5 fails to require two layers (e.g. outermost layer and innermost layer).

8) **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (US 2002/0007893) in view of Verbrugghe (WO 98/38050) and Japan 426 (JP 11-020426) as applied above and further in view of Japan 713 (JP 11-129713).**

As to claim 4, it would have been obvious to one of ordinary skill in the art to incline the high electrically conductive band (figure 3b) at an angle of 45-75 degrees with respect to the equatorial plane in view of Japan 713's teaching to incline an high

electrically conductive rubber member extending through a low electrically conductive rubber tire tread at a relatively large angle (illustrated angle of 70 degrees in figure 4).

9) **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (US 2002/0007893) in view of Verbrugghe (WO 98/38050) and Japan 426 (JP 11-020426) as applied above and further in view of Europe 397 (EP 1201397).**

As to claim 10, it would have been obvious to one of ordinary skill in the art to use a calendar to form the conductive rubber ribbon 10 since Europe 397, also directed to strip winding a tire tread, suggests using a calendar to form a rubber tape for strip winding so that the desired thickness can be obtained.

Allowable Subject Matter

10) **Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

Claims 13 and 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.

Remarks

11) With respect to claims 2, 4, 5, 10 and 11, applicant's arguments filed 6-30-09 have been fully considered but they are not persuasive.

Applicant argues that the configurations of the electrically conductive band taught by Verbrugghe are completely different than those of claim 2 and emphasizes the difference between widthwise and circumferential. Applicant's arguments are not

persuasive since Koyama et al, Verbrugghe and Japan 426 teach the same structure of a conductive rubber strip extending through a low conductive rubber tread for the same function of forming an electrical path for static discharge. When having such a structure, Japan 426 and Verbrugghe motivate one of ordinary skill in the art to lengthen the conductive strip such that it has the claimed top and bottom parts to obtain the expected and predicted benefit of ensuring electrical connection (Verbrugghe) / obtaining full antistatic effect (Japan 426).

12) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven D. Maki/
Primary Examiner, Art Unit 1791

Steven D. Maki
November 22, 2009